



EDMS 5.1.3 Release Notes

November 15, 2010

EDMS is a combined emissions and dispersion model for assessing air quality at civilian airports and military air bases. The model was developed by the Federal Aviation Administration (FAA) in cooperation with the United States Air Force (USAF).

These release notes provide a summary of the improvements and bug fixes for EDMS 5.1.3. For more information on EDMS please check the EDMS User's and Technical Manual.

New functionalities and major updates have been added to EDMS 5.1.3:

- Updated to the latest version of AERMOD v09292. Based on some preliminary test runs, ambient concentration results are not impacted significantly between the two versions, if at all. EPA has indicated that the runtime for AERMOD will be faster with this version.
- Updated the Airport Emissions Reduction Credit (AERC) Report for the Voluntary Airport Low Emissions.
 - A single Emission Reduction (ER) Report is now produced with useful life calculations based on user-defined useful life.
 - The user can specify source groups for ER Report.
- Fleet Database Updates:
 - Incorporated BADA version 3.8.
 - Updated the performance (INM_TYPE) and a BADA profile mappings of several aircraft-engine combinations:
 - 2 aircraft-engine combinations were mapped to new performance (INM_TYPE) and a new BADA profiles.
 - 12 aircraft-engine combinations were mapped to new performance (INM_TYPE) profiles.
 - 493 aircraft-engine combinations were mapped to new BADA profiles.
 - The number of engines for the Boeing DC-6, the Lockheed L-1329 Jetstar I, and the Lockheed L-1329 Jetstar II was corrected from 2 to 4.
 - 3 new aircraft-engine combinations have been added:
 - Boeing 747-100 Series aircraft with the JT9D-7R4D, -7R4D1 engine.
 - Boeing DC-8 Series 60 aircraft with the JT8D-7 series engine.
 - Boeing DC-9-50 Series aircraft with the JT8D-7 series engine.
- The maximum analysis year was increased from 2050 to 2099. (motor vehicle and GSE emission rates will be kept constant at 2050 values for analysis years of 2051 through 2099).
- Updated GUI and Database to accept up to 3 digits for APU usage time in minutes (e.g. 999 vs. 99).
- Updated the default GSE attached to the CASA 212 aircraft to be more representative.
- Updated NAAQS Table in the User Manual and EDMS Help.
- Recompiled MOBILE to be used on a 64-bit computer. The MOBILE results are not changed from this action.

In addition to the new functionalities and updates, the following bugs have been corrected:

- Fixed a problem where approach sources were not generated when the runway elevation was higher than the airport elevation.
- The previous version of EDMS did not save and load properly the PM (2.5 and 10) emission factors and emissions of user-created GSE's. EDMS 5.1.3 now saves and loads these values.
- Corrected an issue where the TOG field in the Roadways and Parking Facilities dialogs was not saving values edited by the user.
- Removed the inactive options from the right-click popup menus of the user-created dialogs.
- Fixed a bug when trying to delete multiple user-created aircraft. EDMS now allows the user to delete multiple user-created aircraft.